

### Patent claims

1. Contamination barrier for the prevention of contamination of aqueous solutions in open and/or automated system that comprises at least one water immiscible hydrocarbon or hydrocarbon mixture.
2. Contamination barrier as described in claim 1 characterised in that it is an unsubstituted hydrocarbon.
3. Contamination barrier as described in claim 1 characterised in that it is a substituted hydrocarbon.
4. Contamination barrier as described in one of claims 1 to 3 characterised in that it is a saturated or unsaturated cyclic hydrocarbon.
5. Contamination barrier as described in one of the claims 1 to 3 characterised in that it is a branched and/or unbranched acyclic hydrocarbon.
6. Contamination barrier as described in one of the claims 1 to 5 characterised in that the hydrocarbon has 5 to 20, preferably 6 bis 16, most preferably 8 bis 12 carbon atoms.
7. Contamination barrier as described in one of the claims 1 to 6 characterised in that this as hydrocarbon is most preferably a branched or unbranched alkane with preferably 8 to 12 carbon atoms.
8. Contamination barrier as described in claim 7 characterised in that this as alkane is preferably octane, nonane, decane and/or decane as well as mixtures thereof.
9. Contamination barrier as described in one of the claims 1 to 8 characterised in that this as hydrocarbon mixture is mineral oil.

10. Method for the prevention of contamination characterised in that during the processing of aqueous solutions in open and/or automated systems they are covered with at least one water immiscible hydrocarbon or hydrocarbon mixture.

5 11. Method as described in claim 10 characterised in that an unsubstituted hydrocarbon is used for covering.

12. Method as described in claim 10 characterised in that a substituted hydrocarbon is used for covering.

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13. Method according to one of the claims 10 to 12 characterised in that a saturated or unsaturated cyclic hydrocarbon is used.

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14. Method according to one of the claims 10 to 12 characterised in that a branched or unbranched acyclic hydrocarbon is used.

15. Method according to one of the claims 10 to 14 characterised in that a hydrocarbon with 5 to 20, preferably 6 to 16, most preferably 8 to 12 carbon atoms is used.

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16. Method according to one of the claims 10 to 15 characterised in that as hydrocarbon most preferably a branched or unbranched alkane with preferably 8 to 12 carbon atoms is used.

17. Method according to claim 16 characterised in that as alkane preferably octane, nonane, decane and/or dodecane as well as mixtures thereof are preferably used.

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18. Method according to one of the claims 10 to 17 characterised in that as hydrocarbon mixture, mineral oil is used.

### Summary

The present invention concerns a contamination barrier 5 that permits an efficient and reproducible processing of a high number of samples with the prevention of contamination of aqueous solutions 3 in open and/or automated systems, especially in the ppm range, in that it comprises at least one water immiscible hydrocarbon compound. In addition a method for the prevention of contamination during the processing of aqueous solutions 3 in open and/or automated systems is disclosed.